

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009049**Date Inspected:** 21-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 1AE to 1AAE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Stiffeners which are welded in between the "I" Rib stiffener at Deck Panel. The weld joint is identified as OBE1-071/072. The welder is identified as 045138. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2113-FCM-1.

Segment 1AE to 1AAE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Stiffeners which are welded in between the "I" Rib stiffener at Bottom Panel. The weld joint is identified as OBE1-189/190 and 191/192. The welder is identified as 067103. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133.

Lift 4 (East)

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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This Quality Assurance (QA) Inspector verified the smoothness and cross verified the dimension taken by ABF for the Cope Holes of Longitudinal Diaphragm, Side Panel to Bottom Panel and Bottom Panel to Bottom Panel from PP 24 to PP 28 North and South Side.

### Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW at PP34 Cross Beam side Lower Chevron angle connecting to Floor Beam flange to splice plate temporary bolts being cut by hack saw and grade ASTM A325 bolt installation was in progress.

### Segment 5AW

This Quality Assurance (QA) Inspector observed at 5AW at PP30 Cross Beam side Floor Beam Diaphragm to I-Beam connecting bolt for Lower Chevron bolt Snug Tightening being performed and 180 degree turn of nut was in progress.

### Segment 5CE

This Quality Assurance (QA) Inspector observed at Segment 5CE at PP 35 and Segment 5BE at PP 34 for Longitudinal Diaphragm Cross Beam side heat straightening was in progress.

### Segment 5BE and 5AE

This Quality Assurance (QA) Inspector observed for Segment 5BE and 5AE between PP 32 and 31 for Hold Back area at Bottom Panel, Side Panel North and South side cope hole grinding and Hold Back fillet welded area grinding was in progress.

### Segment 5AE

This Quality Assurance (QA) Inspector observed at 5AE at PP 30 Cross Beam side Lower Chevron Box Section to Splice Plate bolts snug tightening was in progress.

### Segment 1AE to 1AAE

This Quality Assurance (QA) Inspector observed at 1AE to 1AAE Bottom Panel UT test was being performed by ZPMC for Transverse Weld.

### Segment 1BW

This Quality Assurance (QA) Inspector observed at 1BW Cross Beam side Lifting Lug MT test being performed by ABF.

### Lift 4 West

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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This Quality Assurance (QA) Inspector observed at Lift 4 West painting activities in progress.

Lift 3 West

This Quality Assurance (QA) Inspector observed at Lift 3 West painting activities in progress.

Segment 2AW

This Quality Assurance (QA) Inspector observed at 2AW between PP 14 and 14.5 and PP 13.5 to 14 for instating Cable Tray on Bottom Panel T-Rib drilled holes being grinded to slot cross section slotted holes on 5th, 6th, 7th and 8th T-Rib taking reference from Longitudinal Diaphragm Counter Weight Side.

Segment 1AE

This Quality Assurance (QA) Inspector observed at 1AE at PP 8.5 Deck Panel Diaphragm to Floor Beam flange connecting weld grinding was in progress for rectifying Visual discontinuities that were found by ZPMC.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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